

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of making a spray-formed article, the method comprising:

a) providing a mold that is the inverse of the article, the mold having an exposed surface to be coated by a metallic spray;

b) placing the mold on an indexing table that is rotatable in increments between 0 and 360 degrees;

c) directing the metallic spray onto a first portion of the mold;

d) rotating the mold by a discrete angular increment; and

e) directing the metallic spray onto an adjacent portion of the ceramic mold while linearly translating the mold along at least one linear axis for a discrete time period;

f) repeating steps d) and e) until a metal-coated mold is formed wherein a substantial portion of the surface of the mold has been coated with the metal spray and the metal-coated mold comprises a metal layer over the mold.

2. (Original) The method of claim 1 further comprising:

g) allowing the metal-coated mold to cool; and

h) separating the metal layer and the mold to provide the article.

3. (Original) The method of claim 1 wherein the mold and the metal spray are translated linearly along at least one axis relative to each other.

4. (Cancelled)

5. (Currently Amended) The method of claim [[4]] 1 wherein the mold is:

- 1) translated along a first linear axis for a first time period;
- 2) translated along a second linear axis for a second time period; and
- 3) translated along a third linear for a third time period;

wherein each of the first, second, and third time axes are different.

6. (Currently Amended) The method of claim [[4]] 1 wherein the mold is translated linearly along a first linear axis during step e for a first time period and then translated linearly along a second linear axis during step e for a second time period, the second linear axis different than the first linear axis.

7. (Original) The method of claim 6 wherein the first linear axis is essentially perpendicular to the second linear axis.

8. (Original) The method of claim 7 wherein the mold has a maximum linear dimension and the discrete angular increment of step d allows the mold to be translated completely along the maximum linear dimension.

9. (Original) The method of claim 1 wherein the mold tilted relative to a normal to the ground.

10. (Original) The method of claim 1 wherein the mold is rotated a total of at least 180 degrees.

11. (Original) The method of claim 1 wherein the mold is rotated a total of at least 360 degrees.

12. (Original) The method of claim 1 wherein each rotation of the mold is from 10 to 180 degrees.

13. (Original) The method of claim 1 wherein each rotation of the mold is from 30 to 180 degrees.

14. (Original) The method of claim 1 wherein each rotation of the mold is about 90 degrees.

15. (Original) The method of claim 1 wherein the metal spray is stopped during each rotation of the mold.

16. (Original) The method of claim 1 wherein the metal spray is not stopped during each rotation of the mold.

17. (Previously Presented) The method of claim 16 wherein the step of rotating the mold has an angular velocity that is sufficiently high that less than about 10% of a coating formed by the metal spray forms during rotation.

18. (Original) The method of claim 1 wherein the metal spray is formed by melting one or more consumable wires with an electric arc to form molten metal and atomizing the molten metal with a high velocity gas jet.

19. (Original) The method of claim 18 wherein two consumable wires are melted with the electric arc.

20. (Currently Amended) An apparatus for making a spray-formed article, the apparatus comprising:

an indexing table for emplacement of a mold, the mold being the inverse of the article; and

a thermal spray gun for forming an atomized metal; and

wherein the indexing table is rotatable in a series of discrete increments and translatable along at least one linear axis for a discrete time period while a metallic spray is directed onto an adjacent portion of the ceramic mold.

21. (Original) The apparatus of claim 20 wherein the indexing table is rotatable in increments between 0 degrees and 360 degrees.

22. (Original) The apparatus of claim 20 wherein the indexing table is rotatable a series of increments that when added together produce a total rotation that is greater than 360 degrees.

23. (Original) The apparatus of claim 20 further comprising a programmable controller for rotating the indexing table.

24. (Original) The apparatus of claim 20 wherein the programmable controller is a robot or a computer.

25. (Original) The apparatus of claim 20 wherein the programmable controller is a six-axis robot.

26. (Original) The apparatus of claim 20 wherein the thermal spray gun includes an electric arc source, a nozzle for producing a high velocity gas, and at least one consumable metal wire such that the at least one consumable metal wire is melted during operation of the thermal spray gun.

27. (Original) The apparatus of claim 20 wherein the at least one consumable metal wire is two consumable metal wires.